CRATE B40 XL

BASS AMPLIFIER

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We would like to take this opportunity to thank you for selecting a Crate product, and to tell you of our commitment to the design and manufacture of only the finest musical instrument amplification equipment; built for you, the musician.

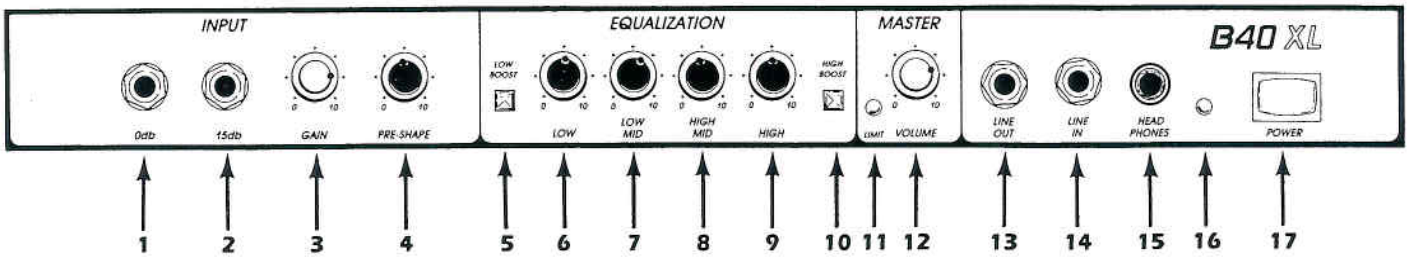
You have purchased one of the most innovative sound amplification devices available today. Your Crate amplifier gives you more performance features than ever before; features that you, the musician, have asked for.

Your Crate amplifier is an American product, manufactured at our factory in St. Louis, Missouri. Only the finest available components and materials are used in the manufacture of each amplifier.

All Crate amplifiers are subject to seven or more inspection and testing steps to assure you of a high quality product. The final test for each amp is conducted by a trained musician with the instrument the amp was designed for. Any unit that does not meet the standards of his discriminating ear will not be passed.

Since all Crate products are designed, developed, and manufactured through the cooperative efforts of engineers and professional musicians, the end result is a product that responds to the musician's audio requirements, and a product that will serve your needs for years to come.

OPERATION



FRONT PANEL FEATURES AND FUNCTIONS

INPUT SECTION

1. **INPUT JACK:** This input accepts a standard 1/4" phone plug and is suitable for any low to line level signal source such as an electric bass.
2. **–15dB INPUT JACK:** This input also accepts a standard 1/4" plug but is padded 15dB for hotter inputs such as tape decks or active basses. If both jacks are used, this input is not padded and will be equal to the "0dB" input jack.
3. **GAIN CONTROL:** This control sets the amount of gain for the preamp. A low output instrument or soft playing style requires high gain (5-10 settings) while a high output instrument or hard playing style requires less gain (1-4 setting). Too high of a setting along with boosted tone settings may cause distortion or a harshness of sound. If this is not desired, simply reduce the gain with this control.
4. **PRE-SHAPE CONTROL:** This is a pre-EQ "master" tone control. With the control set at 1/2, the signal will pass to the Equalization section "flat" (with no modification of tone). As the control is turned clockwise, high frequencies will be boosted and as the control is turned counterclockwise, low frequencies will be boosted. This control could be used to "dial in" a general tone setting which can be fine tuned by the EQ section or to instantly modify an existing EQ setting with one knob.

EQUALIZATION SECTION

5. **LOW BOOST:** Low frequencies are boosted when this switch is depressed.
6. **LOW CONTROL:** The desired amount of "bottom" or "warmth" may be increased or decreased with this knob. For additional effect, use this control in conjunction with the Low Boost switch (#5) and/or the Pre-Shape control (#4).
7. **LOW MID CONTROL:** This knob will affect the lower harmonic range of the bass. When turned up, it adds a mellow sound by adding more definition to the lower harmonics. When reduced, it creates a hollow, "thin" sound.
8. **HIGH MID CONTROL:** Boosting this control will give the bass more "edge" in distinguishing notes, especially in fast music passages. Reducing this control enables a more flat, mellow sound.
9. **HIGH CONTROL:** This control adds "bite" and "sizzle" to the bass by accentuating only the extreme high frequencies.
10. **HIGH BOOST SWITCH:** This switch affects the brilliance of the bass by adding additional "bite" or sharpness.
11. **LIMIT INDICATOR LED:** The B40XL contains a power amp limiter which automatically limits the signal to the power amp to a point just below "clipping" or distortion. This is to assure a clean undistorted sound at full power. The limit indicator LED will be lit whenever full power is reached.
12. **MASTER VOLUME CONTROL:** This control sets the overall listening level of the B40XL.

OUTPUT SECTION

13. **LINE OUTPUT JACK:** This jack provides a high impedance unbalanced output for connecting the B40XL to another amplifier or tape recorder. Simply run a cable from this jack to the input of another amplifier or tape deck.
14. **LINE INPUT JACK:** This jack is used as a direct input to the power amp. Plugging into this jack disconnects the direct (normal) connection between the preamp and the power amp. The line input jack may be used with the line output jack (#13) as an effects loop.
15. **HEAD PHONE JACK:** Standard head phones may be plugged into this jack for private practicing. The speaker is automatically disconnected when head phones are plugged into this jack.
16. **ON/OFF INDICATOR LED:** This LED will be lit when the amplifier is on.
17. **POWER SWITCH:** Pushing this switch to the right turns the B40XL "ON".

REAR PANEL FEATURES

POWER CORD: Your B40XL is equipped with a heavy-duty grounded three-wire power cord. Be sure this cord is properly plugged into a safely wired grounded 120 volt 60 Hz AC power outlet before use. (If your B40XL was purchased outside the United States, refer to the rear panel for power ratings). For your safety, never attempt to defeat the ground connection on this cord.

B40XL TECHNICAL SPECIFICATIONS

Output Power Rating	40 watts RMS @ 5% THD 8 ohm Load—120 VAC line
Speaker Size and Rating	12" with 1-1/2" voice coil Power Handling 40 Watts RMS
Low Control	± 10 dB @ 50 Hz
Low Mid Control	± 10 dB @ 200 Hz
High Mid Control	± 10 dB @ 800 Hz
High Control	± 10 dB @ 4KHz
Low Boost	+ 8 dB @ 40 Hz
High Boost	+ 8 dB @ 8 kHz
Pre-Shape Control	12 dB boost @ 6 kHz 10 dB boost @ 100 Hz
Input Impedance	220 k ohms
Maximum Input Signal Level Accepted	15 volts peak-to-peak
Gain @ 1kHz	48 dB with tones flat and boost switches off
Line Output Jack	2.5 volts, peak-to-peak @ full rated output
Signal to Noise Ratio	68 dB with gain and volume at "10", tones flat, boost switches off
Input Power Requirements	120 VAC, 60 Hz, 100 watts max.
Size and Weight	21"H x 19-1/2"W x 12-1/2"D lbs.

Specifications subject to change without notice.

CAUTION: To reduce the risk of electric shock, do not remove chassis. No user serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION: This equipment is capable of producing sound pressure levels greater than 110 dB SPL. Continued exposure to such high sound pressure levels can cause permanent hearing impairment or loss. user caution is advised, and ear protection is recommended.